Abstract of the Disclosure

The present invention relates to nucleotide sequences, including expressed sequence tags (ESTs), oligonucleotide probes, polypeptides, vectors and host cells expressing, and immunoadhesions and antibodies to mammalian GFR α 3, a novel α -subunit receptor of the GDNF (i.e. GFR) receptor family. It further relates to an assay for measuring activation of an α -subunit receptor by detecting tyrosine kinase receptor activation (i.e., autophosphorylation) or other activities related to ligand-induced α -subunit receptor homo-dimerization or homo-oligomerization.